

Application/Control Number: 09/965,374
Art Unit: 2127

Docket No.: PALM-3612

CLAIM AMENDMENTS

Please replace all prior listing of claims with the following claim set:

In the claims:

1. (currently amended) ~~In a computer system, a~~ A method for scheduling tasks, ~~said method~~ comprising:

a) a background task registering at least one registered service, ~~said the~~ background task invoked by a kernel of ~~said the~~ computer operating system in a dedicated pre-assigned time slice, ~~said the~~ computer operating system comprising ~~said the~~ background task and a foreground task, ~~said the~~ background task being scheduled independent from the operation of ~~said the~~ foreground task, ~~said the~~ background task for providing an execution presence and a data presence to each of the at least one ~~a~~ registered service;

b) ~~said the~~ background task ranking ~~said the~~ at least one registered service according to ~~the~~ requirements of ~~said each of the at least one~~ registered service; and

c) ~~said the~~ background task allocating ~~said the~~ execution presence and ~~said the~~ data presence accordingly to each of ~~said the~~ at least one registered service ~~services~~ such that each of ~~said the~~ at least one registered service ~~services~~ is given an opportunity to be scheduled in ~~said the~~ dedicated pre-assigned time slice.

2. (currently amended) A method as recited in Claim 1 further comprising the step of ~~said the~~ background task searching for ~~at least one said~~ one or more of the at least one registered service associated therewith.

3. (currently amended) A method as recited in Claim 1 wherein ~~said the~~ computer system is a portable electronic device.

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4. (currently amended) A method as recited in Claim 1 wherein ~~said~~ the data presence is an AS-based global variable context.

5. (currently amended) A method as recited in Claim 1 wherein ~~said~~ the service is a system-related activity.

6. (currently amended) A method as recited in Claim 1 wherein ~~said~~ the service is an interrupt-related activity.

7. (currently amended) A method as recited in Claim 1 wherein ~~said~~ the service is a background-related activity.

8. (currently amended) A method as recited in Claim 1 further comprising the step of periodically repeating ~~said~~ the steps a) through c).

9. (currently amended) A method as recited in Claim 2 further comprising the step of periodically repeating ~~said~~ the step of ~~said~~ the background task searching for at least one service associated therewith.

10. (currently amended) A method for scheduling tasks comprising:

a) a task registering at least one registered service, ~~said~~ the task invoked by a kernel of ~~said~~ the computer operating system in a dedicated pre-assigned time slice, ~~said~~ the task for providing an execution presence and a data presence to ~~said~~ the registered service;

b) ~~said~~ the task ranking ~~said~~ the registered service according to the requirements of ~~said~~ the registered service; and

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c) ~~said the~~ task allocating ~~said the~~ execution presence and ~~said the~~ data presence accordingly to each of ~~said the~~ registered services such that each of ~~said the~~ registered services is given an opportunity to be scheduled in ~~said the~~ dedicated pre-assigned time slice.

11. (currently amended) A method as recited in Claim 10 further comprising the step of ~~said the~~ task searching for at least one ~~said the~~ service associated therewith.

12. (currently amended) A method as recited in Claim 10 wherein ~~said the~~ computer system is a portable electronic device.

13. (currently amended) A method as recited in Claim 10 wherein ~~said the~~ data presence is an AS-based global variable context.

14. (currently amended) A method as recited in Claim 10 further comprising the step of periodically repeating ~~said the~~ steps a) through c).

15. (currently amended) A method as recited in Claim 11 further comprising the step of periodically repeating ~~said the~~ step of ~~said the~~ background task searching for at least one service associated therewith.

16. (currently amended) A computer system comprising:

a processor coupled to a bus;

a memory unit coupled to ~~said the~~ bus having stored therein an operating system executed by ~~said the~~ processor and a background task executed by ~~said the~~ processor; wherein ~~said the~~ background task performs a method comprising:

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a) registering at least one registered service, ~~said~~ the background task invoked by a kernel of ~~said~~ the computer operating system in a dedicated pre-assigned time slice, ~~said~~ the computer operating system comprising ~~said~~ the background task and a foreground task, ~~said~~ the background task independent from the operation of ~~said~~ the foreground task, ~~said~~ the background task for providing an execution presence and a data presence to a registered service;

b) ranking ~~said~~ the registered service according to the requirements of ~~said~~ the registered service; and

c) allocating ~~said~~ the execution presence and ~~said~~ the data presence accordingly to each of ~~said~~ the registered services such that each of ~~said~~ the registered services is given an opportunity to be scheduled in ~~said~~ the dedicated pre-assigned time slice.

17. (currently amended) A computer system as recited in Claim 16 wherein ~~said~~ the background task further performs the step of searching for at least one ~~said~~ the service associated with ~~said~~ the background task.

18. (currently amended) A computer system as recited in Claim 16 wherein ~~said~~ the computer system is a portable electronic device.

19. (currently amended) A computer system as recited in Claim 16 wherein ~~said~~ the data presence is an AS-based global variable context.

20. (currently amended) A computer system as recited in Claim 16 wherein ~~said~~ the service is a system-related activity.

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21. (currently amended) A computer system as recited in Claim 16 wherein ~~said~~ the service is an interrupt-related activity.

22. (currently amended) A computer system as recited in Claim 16 wherein ~~said~~ the service is a background-related activity.

23. (currently amended) In a computer system, a method for scheduling tasks, ~~said~~ the method comprising:

a) cycling through a set of pre-assigned time slices to schedule a set of tasks comprising a background task and a foreground task, each of ~~said~~ the tasks assigned to one of ~~said~~ the time slices wherein scheduling of ~~said~~ the background task is independent from the scheduling of ~~said~~ the foreground task; and

b) scheduling execution of a service manager operating on ~~said~~ the background thread wherein ~~said~~ the step b) comprises the step of:

b1) ~~said~~ the service manager scheduling a set of services that are registered therewith for execution within its time slice, wherein ~~said~~ the set of registered services may be dynamically updated; and

b2) ~~said~~ the service manager allocating a data presence to each of ~~said~~ the set of services registered therewith.

24. (currently amended) A method as recited in Claim 23 wherein ~~said~~ the computer system is a portable electronic device.

25. (currently amended) A method as recited in Claim 23 wherein ~~said~~ the data presence is an AS-based global variable context.

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26. (currently amended) In a computer system having a number of foreground applications executing, a method for scheduling tasks, ~~said the~~ method comprising ~~comprising~~:

- a) a kernel of an operating system scheduling a plurality of tasks for execution on ~~said the~~ computer system within respective time slices, ~~said the~~ plurality of tasks being in a static ~~mode in definition~~ and one of ~~said the~~ tasks being a service manager;
- b) a plurality of applications dynamically registering with ~~said the~~ service manager; and
- c) ~~said the~~ service manager, when itself executing in its time slice, scheduling for execution ~~said the~~ plurality of applications based in a priority, wherein applications are scheduled for execution by ~~said the~~ service manager in a manner independent from any of ~~said the~~ foreground applications.

27. (currently amended) A method as recited in Claim 26 wherein ~~said the~~ plurality of applications comprise a system service, an interrupt service and a background service.

28. (currently amended) A method as recited in Claim 26 wherein ~~said the~~ computer system is a handheld computer system.

29. (currently amended) A method as recited in Claim 26 wherein ~~said the~~ step b) comprises the step of ~~said the~~ service manager dynamically registering ~~actively discovering~~ ~~said the~~ plurality of applications based on registration information associated therewith.